

# Novel Coronavirus (2019-nCoV)

## Interim Enhanced Surveillance Guidance for County Health Departments (CHDs)

Version 1 | January 22, 2020

### Summary

- **Surveillance:** CHDs should apply the definition of person under investigation (PUI) for 2019-nCoV to determine if laboratory testing and public health investigation is needed.
- **Investigations:** Investigations should occur for individuals meeting the definition of PUI for 2019-nCoV within the same day of CHD notification.
  - County epidemiology staff should alert their regional epidemiologist and laboratory liaison of all PUIs for 2019-nCoV.
- **Reporting PUIs and Cases:** PUIs or persons meeting the confirmed or probable case definition for 2019-nCoV should be entered into Merlin within **24 hours (including weekends)**.
- **CHD Laboratory Results Notification Process for 2019-nCoV:** TBA
- **Documents on this topic dated after January 22, 2020, supersede this one.**

### Background

On January 11, 2020, Chinese health authorities preliminarily identified more than 40 human infections with novel coronavirus in an outbreak of pneumonia under investigation in Wuhan City, Hubei Province, China. Chinese health authorities subsequently posted the full genome of the so-called “novel coronavirus 2019”, or “2019-nCoV”, in GenBank®, the National Institutes of Health genetic sequence database.

The Centers for Disease Control and Prevention (CDC) continues to monitor this outbreak, which includes over 300 confirmed human cases in China and several deaths. Exported cases from Wuhan have been identified in Thailand, Japan, the Republic of Korea, and the United States. Early on, many cases reportedly had some link to a large seafood and animal market, suggesting animal-to-human spread. However, a growing number of cases reportedly have not had exposure to animal markets, suggesting limited person-to-person spread is occurring, though it is unclear how easily or sustainably the virus is spreading between people.

Coronaviruses are a large family of viruses, some causing illness in people and others that circulate among animals, including camels, cats, and bats. Rarely, animal coronaviruses can evolve and infect people and then spread between people, as seen with Middle East Respiratory Syndrome and Severe Acute Respiratory Syndrome.

There is an ongoing investigation to determine more about this outbreak. This is a rapidly evolving situation. This document may become outdated as situations change.

For the latest situation updates, visit [www.cdc.gov/coronavirus/novel-coronavirus-2019.html](http://www.cdc.gov/coronavirus/novel-coronavirus-2019.html).

### Surveillance for 2019-nCoV

**A PUI is a person with the following characteristics:**

1. Fever<sup>1</sup> **and** symptoms of lower respiratory illness (e.g., cough, shortness of breath) **and one or both of the following:**
  - History of travel to or from Wuhan City, Hubei Province, China, within 14 days before symptom onset; **or**

- Close contact<sup>2</sup> with a person who is under investigation for 2019-nCoV while that person was ill.
- 2. Fever<sup>1</sup> **or** symptoms of lower respiratory illness (e.g., cough, shortness of breath) **and**
  - Close contact<sup>2</sup> with an ill laboratory-confirmed 2019-nCoV patient.

Patients with lower respiratory illness should also be evaluated for common causes of community-acquired pneumonia, guided by clinical presentation and epidemiologic and surveillance information. For these patients, testing for 2019-nCoV and other respiratory pathogens should be done simultaneously. Positive results for another respiratory pathogen (e.g., influenza) should not preclude testing for 2019-nCoV because co-infection may occur.

### 2019-nCoV Case Definition:

**Confirmed:** A confirmed case is a person with laboratory confirmation of 2019-nCoV infection.

**Probable:** A probable case is a PUI with absent or inconclusive laboratory results for 2019-nCoV who is a close contact<sup>2</sup> of a laboratory-confirmed 2019-nCoV case.

**Suspect:** A suspect case is a PUI with 2019-nCoV laboratory tests pending.

<sup>1</sup>Fever may not be present in some patients, such as those who are very young, elderly, immunosuppressed, or taking certain fever-lowering medications. Clinical judgement should be used to guide testing of patients in such situations.

<sup>2</sup>Close contact is defined as:

- a) Being within approximately six feet (two meters), or within the room or care area, of a novel coronavirus for a prolonged period of time while not wearing recommended personal protective equipment (PPE [e.g., gowns, gloves, NIOSH-certified disposable N95 respiratory, eye protection]); close contact can include caring for, living with, visiting, or sharing a health care waiting area or room with a novel coronavirus case, **or**
- b) Having direct contact with infectious secretions of a novel coronavirus case (e.g., being coughed on) while not wearing recommended PPE

### Investigations of PUI for 2019-nCoV

- County epidemiology staff should investigate each report of possible 2019-nCoV to determine if the PUI for 2019-nCoV criteria are met.
- County epidemiology staff should contact their Regional Epidemiologist and Laboratory Liaison, or Bureau of Epidemiology (BOE) on-call epidemiologist (if after hours), if a county is investigating a potential PUI or if they have any questions.
- Conduct patient/proxy or health care provider interviews and record reviews to obtain essential information, which includes history of present illness, medical history, travel dates, flight information, risk factors, differential diagnoses, and microbiology test results.
- Enter the PUI into Merlin (see 'Reporting 2019-nCoV PUI and Cases in Merlin') and complete extended data within 24 hours of receipt of information.

### Infection Control Considerations

- PUIs should be asked to wear a surgical mask as soon as they are identified and be evaluated in a private room with the door closed, ideally an airborne infection isolation room, if available.
- While a PUI for 2019-nCoV is receiving health care, it is important that standard, contact, and airborne precautions are used.

### Management of Cases and PUIs

- A PUI may be discharged before 2019-nCoV is ruled out. The decision to discharge a PUI for 2019-nCoV is up to the treating physician.
  - PUIs should be provided surgical masks and asked to isolate themselves at home until fever and symptom-free for 24 hours without antipyretic medication (acetaminophen, ibuprofen).
  - Health care facilities caring for PUIs should admit or discharge as needed for necessary clinical care, not for the purpose of public health investigation.
  - Close contacts of confirmed or probable cases who develop compatible symptoms should also be managed as 2019-nCoV PUIs. Specimens should be collected, and PUIs should be isolated at home or while seeking health care until 2019-nCoV testing at CDC is completed.
- For **confirmed** 2019-nCoV cases, the decision to discharge is based on public health and medical assessment with the BOE, including presence of symptoms and multiple negative specimens.

### Laboratory Testing and Specimen Collection

- If PUI criteria are met, contact your Regional Epidemiologist and Laboratory Liaison ([FloridaHealth.gov/diseases-and-conditions/disease-reporting-and-management/disease-reporting-and-surveillance/\\_documents/investigation-unit-map.pdf](https://www.floridahealth.gov/diseases-and-conditions/disease-reporting-and-management/disease-reporting-and-surveillance/_documents/investigation-unit-map.pdf)) or the after-hours BOE on-call epidemiologist (850-245-4401) to arrange for specimens to be submitted to the Bureau of Public Health Laboratories (BPHL).
- **BPHL will ship specimens to CDC for testing until testing is made available at state public health laboratories.**
- To increase the likelihood of detecting 2019-nCoV, CDC recommends collecting multiple specimens from different sites. Ideally, **all** the following specimens should be collected and submitted to BPHL for each PUI:
  - Upper respiratory: nasopharyngeal and oropharyngeal swabs in viral transport media, each in a separate container
  - Lower respiratory: sputum (induced if necessary), bronchial alveolar lavage/tracheal aspirate, each in a sterile container
  - Serum (**red** top or **tiger** top tube)
- If additional specimen types such as stool, urine, or whole blood are available, please also collect and submit to BPHL.
- Ship specimens overnight for arrival to BPHL in Jacksonville, Miami, or Tampa following notification to the appropriate BPHL location.
- **Shipments arriving on the weekend must be pre-authorized by BPHL and BOE.**
- Ship specimens using category B shipping containers.

### Notification Process of Laboratory Results for Specimens Tested by CDC: TBA

### Reporting 2019-nCoV PUIs and Cases in Merlin

- Individuals meeting the confirmed, probable, or PUI (suspect) case definition for 2019-nCoV should be entered into Merlin.
  - Use the disease code “**Coronavirus, Novel 2019 (2019-nCoV) – 00342**” when entering PUIs in Merlin.

#### Disease

Coronavirus, Novel 2019 (2019-nCoV) - 00342 x

- **Enter PUIs within 24 hours of CHD notification.**
- List PUI under **suspect** DX status until laboratory results have been returned.
- Attach all available medical records, laboratory results, and paper PUI form (if available) to the Merlin case.
- Attach CDC laboratory results to the case. If CDC results are negative, update DX status to **not a case** and submit.